

REMARKS

I. Status of the Claims:

Claims 1 and 3 are pending. Claim 1 has been amended herein to incorporate the limitations of previous claim 2 and to modify the claimed range of specific surface area before and after a washing process to 1.07 m²/g or less. Accordingly, previous claim 2 is cancelled herein without prejudice or disclaimer. Claim 3 has been amended so as to depend from claim 1 and to replace the term “using” with “comprising.” Support for the amendment to claim 1 can be found in the as-filed claims and specification. Specifically, support for the amendment to claim 1 is found in original claim 2 and in example 9, as reported in table 1 on page 14 of the as-filed specification. Support for the amendment to claim 3 may be found in original claim 3. Thus, Applicants submit that the above amendments raise no issue of new matter.

Claims 1-3 stand rejected under 35 U.S.C. §102(b) as anticipated by European Patent Application No. EP 0 944 125 (“Sunagawa”). Applicants respectfully disagree with and traverse this rejection for at least the following reasons.

II. Arguments

Claims 1-3 stand rejected under 35 U.S.C. §102(b) as anticipated by Sunagawa. Office Action, page 2. Insofar as this rejection applies to claim 2, it is moot, as claim 2 is cancelled herein. With respect to present claims 1 and 3, Applicants respectfully disagree with and traverse this rejection for at least the following reasons.

According to the Examiner, Sunagawa teaches an active material for a positive electrode of a lithium secondary battery that anticipates all of limitations of claim 1. Office Action, page 2. Specifically, the Examiner asserts that Sunagawa teaches a lithium secondary battery employing an active material having the same chemical

composition and particle size as the claimed active material. *Id.* With respect to the claimed lithium site occupancy rate, the Examiner argues that because Sunagawa “discloses the same active material desired by applicant” this limitation is inherently met. *Id.* Finally, with respect to the claimed washing process, the Examiner asserts that this limitation is merely intended use and does not differentiate the claimed invention from the prior art. *Id.* at 2, 3. Applicants respectfully disagree.

To establish a rejection under 35 U.S.C §102, the Examiner must demonstrate that the reference teaches each and every claim limitation. *See* M.P.E.P § 2141. Indeed, claim is anticipated under §102 **only if** each and every element, as set forth in the claim, is found in a single prior art reference. M.P.E.P. § 2131 (emphasis added). Applicants submit that the Examiner has failed to meet this burden for at least the following reasons.

Present claim 1 recites, *inter alia*, “[a]n active material for positive electrode of a lithium secondary battery...wherein...the Li site occupancy rate for the Li site in the crystal is 98% or greater... and... when the active material is subjected to a washing process, the difference between the specific surface area of the active material before the washing process and after the washing process is 1.07 m²/g or less.” Applicants respectfully submit that the Examiner has failed to establish that the active material disclosed by Sunagawa exhibits the claimed Li site occupancy rate and difference in specific surface area before and after a washing process, as discussed below.

As an initial matter, Applicants note that, contrary to the Examiner's assertions, the recited washing process is not an intended use of active material. Indeed, the recited washing process is not required by the present claim language. Rather, the

claimed difference between the specific surface area of the active material before the recited washing process and after the recited washing process is a property of the claimed active material. As described on page 7, lines 1 to 9, page 9, lines 14 to 23, and table 1 of the as-filed specification, Applicants have found that by utilizing a lithium composite oxide that exhibits the claimed difference in surface area as the active material of a positive electrode of a lithium secondary battery, the initial discharge capacity of the battery is improved.

In order to obtain an active material that exhibits the claimed difference in specific surface area, the manner in which a lithium composite oxide is manufactured must be carefully controlled, e.g. as in the examples of the present specification. Sunagawa, however, does not disclose controlling the manufacturing process of its lithium composite oxide, and certainly does not teach or suggest the desirability of a composite oxide exhibiting the claimed difference in specific surface area.

Moreover, Applicants submit that the Examiner has failed to establish that Sunagawa teaches an active material for a positive electrode of a lithium secondary battery, wherein the lithium site occupancy rate is 98% or greater, as claimed. As mentioned above, the Examiner asserts that because Sunagawa recites “the same material desired by applicant,” the claimed Li site occupancy is inherently met. Applicants respectfully disagree with this assertion, as discussed below.

Applicants acknowledge that, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977).

However, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *Best*, 562 F.2d at 1255.

Applicants submit that one need only look to the as-filed specification of the present application for evidence that the lithium occupancy rate of an active material is not inherently met simply because the active material meets the claimed composition. Indeed, in table 1 of the as-filed specification, Applicants report the lithium occupancy rates for 11 examples and 5 comparative examples. As discussed on pages 11 and 12, the composition utilized to form the active material of examples 1-11 and comparative examples 1-5 is identical. However, as shown in table 1, comparative examples 1-3 do not exhibit the claimed lithium site occupancy rate. Applicants submit that this is clear evidence that even if the composition of Sunagawa falls within the scope of the claimed composition, it does not necessarily possess the claimed lithium site occupancy rate. Applicants remind the Examiner that "inherency...**may not** be established by probabilities or possibilities. The mere fact that a certain thing **may** result from a given set of circumstances is **not** sufficient." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (citations omitted) (emphasis added).

For at least the foregoing reasons, Applicants submit that Sunagawa fails to teach all of the limitations of present claim 1. Specifically, Sunagawa fails to teach an active material for a lithium secondary battery comprising a lithium composite oxide that exhibits the claimed lithium site occupancy rate and difference in specific surface area. Therefore, Applicants submit that the rejection of present claim 1 under 35 U.S.C. §102(b) is improper, and should be withdrawn. Further, as claim 3 is dependant from

claim 1, the rejection of this claim under §102(b) is also improper, and should be withdrawn.

III. Conclusion


In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No.: 06-0916.

Respectfully submitted,

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